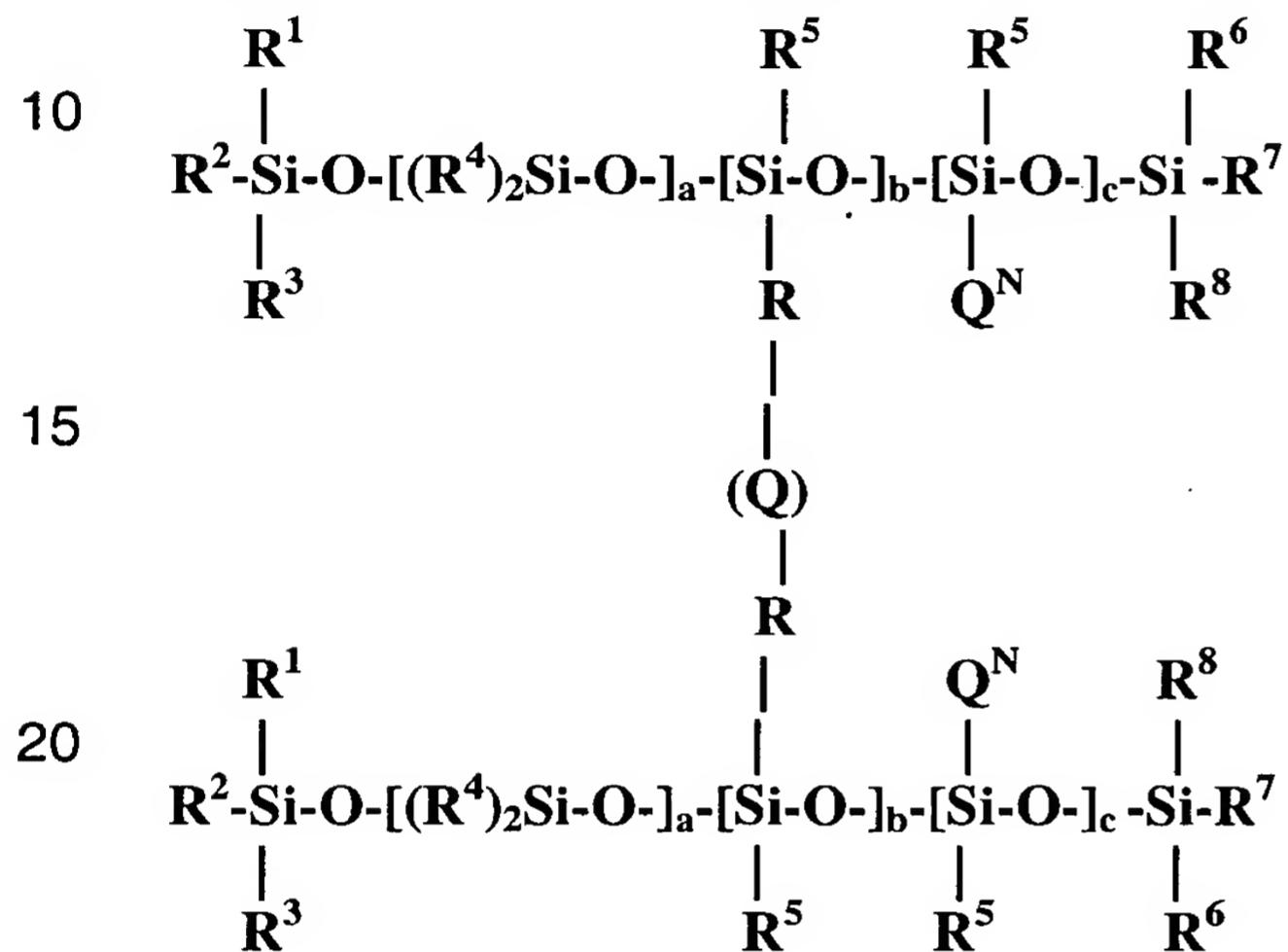


Claims

We Claim:

1. A personal care product selected from the group consisting of antiperspirants
 5 and/or deodorants, soaps, and hair care products and made with a quaternary amino functional silicone elastomer having a molecular weight in the range of 50,000 - 650,000 daltons and comprising units which may be the same or different wherein each unit is represented by Formula I:



25 Formula I

where:

$\text{R}^1, \text{R}^2, \text{R}^3, \text{R}^4, \text{R}^5, \text{R}^6, \text{R}^7$ and R^8 may be the same or different and are each independently selected from the group consisting of C1-C10 monovalent hydrocarbon radicals;

30 R is a divalent hydrocarbon radical of formula $-(\text{CH}_2)_s-$ where s is a number in the range of 2-10;

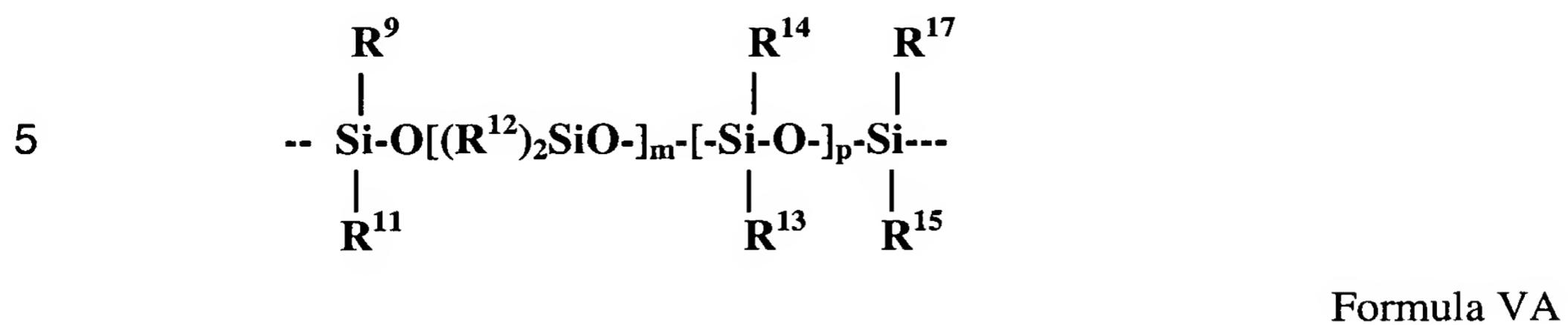
a = is an average value and is a number in the range of 0-500;

b = is an average value and is a number in the range of 1-150;

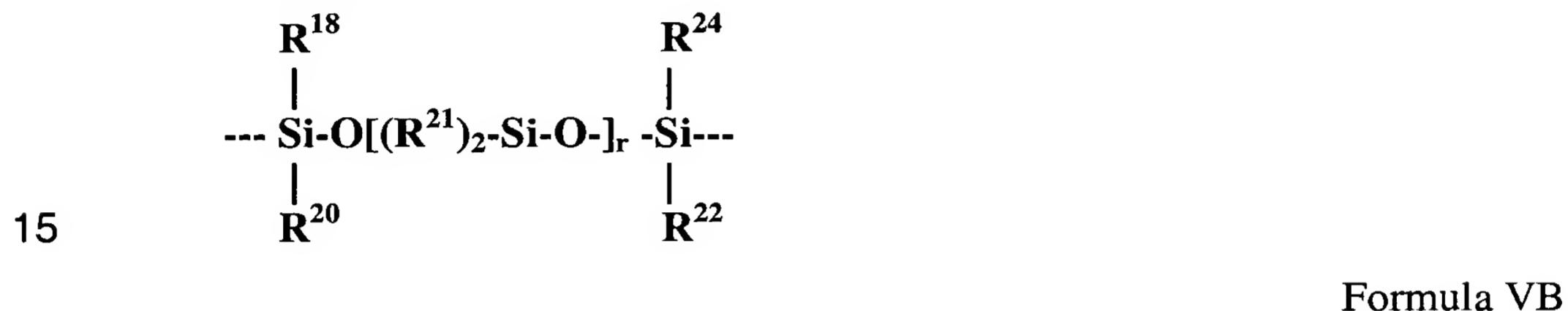
c = is an average value and is a number in the range of 1-50;

35 provided that $\text{b} + \text{c}$ is a number in the range of 2-200;

Q is a siloxane chain selected from the group consisting of Q^{1A} of Formula VA:



10 and Q^{1B} of Formula VB:



where

m is an average number with a value in the range of 2,000-10,000;

20 **p** is an average number with a value in the range of 1-200;

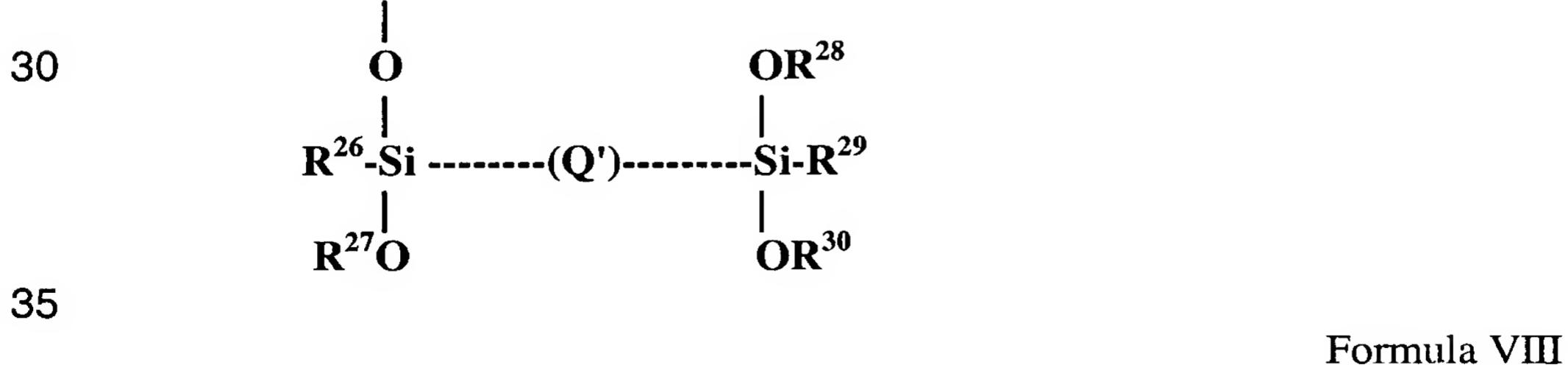
R¹³ is selected from the group consisting of C2-C10 monovalent hydrocarbon radicals having an unsaturation at the terminal carbon which may be used as a crosslinking site at the unsaturation;

R⁹, **R**¹¹, **R**¹², **R**¹⁴, **R**¹⁵ and **R**¹⁷ may be the same or different and are each independently

25 selected from the group consisting of C1 to C10 monovalent hydrocarbon radicals;

R¹⁸, **R**²⁰, **R**²¹, **R**²² and **R**²⁴ may be the same or different and are each independently selected from the group consisting of C1 to C10 monovalent hydrocarbon radicals; and

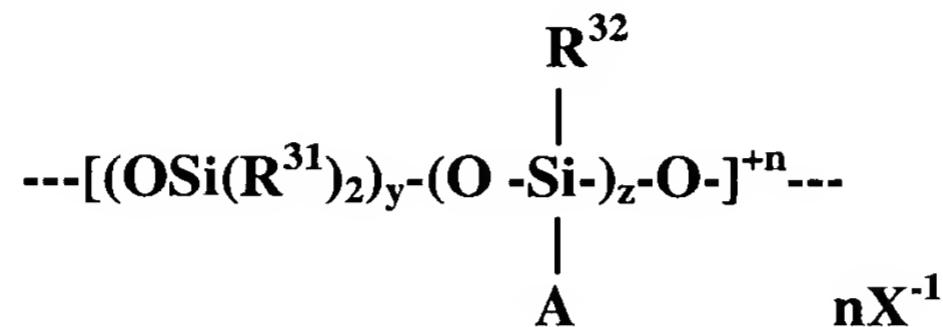
Q^N is a quaternary amino polysiloxane pendent group of Formula VIII:



where

R^{26} , R^{27} , R^{28} , R^{29} and R^{30} may be the same or different and are each independently selected from the group consisting of C1-C10 monovalent hydrocarbon radicals; and Q' is a quaternary amino functional polydimethylsiloxane of formula:

5



10

where:

$A =$ a di-cation of formula $-(CH_2)_3N(R^{37})_2^+CH_2CH_2N(R^{38})_3^{+1}$ or a mono-cation of formula $-(CH_2)_3N(R^{39})_3^{+1}$; X^{-1} is selected from the group consisting of CH_3COO^{-1} ,

15 $(SO_4)^{-2}$; $(SO_3)^{-1}$; Cl^{-1} ; I^{-1} ; and F^{-1} (particularly CH_3COO^{-1} ; I^{-1} and Cl^{-1});

R^{31} and R^{32} may be the same or different and are each selected from the group consisting of C1-C10 monovalent hydrocarbon radicals;

R^{37} , R^{38} and R^{39} may be alike or different and are each independently selected from the group consisting of hydrogen, and C1-C10 monovalent hydrocarbon radicals.

20

2. A personal care product a claimed in Claim 1 wherein the quaternary amino functional silicone elastomer of has a molecular weight in the range of 70,000-200,000 daltons.

25

3. A personal care product a claimed in Claim 1 wherein the quaternary amino functional silicone elastomer has each of R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 and R^8 as methyl.

4. A personal care product a claimed in Claim 1 wherein the quaternary amino functional silicone elastomer has each of R^9 , R^{11} , R^{12} , R^{14} , R^{15} and R^{17} as methyl.

30

5. A personal care product a claimed in Claim 1 wherein the quaternary amino functional silicone elastomer has each of R^{18} , R^{20} , R^{21} , R^{22} and R^{24} as methyl.

-26-

6. A personal care product a claimed in Claim 1 wherein the quaternary amino functional silicone elastomer has each of R²⁶, R²⁷, R²⁸, R²⁹ and R³⁰ as methyl.
7. A personal care product a claimed in Claim 1 wherein the quaternary amino functional silicone elastomer has each of R³¹, R³², R³⁷, R³⁸ and R³⁹ as methyl.
5
8. A personal care product a claimed in Claim 1 wherein the quaternary amino functional silicone elastomer has each of R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹¹, R¹², R¹⁴, R¹⁵, R¹⁷, R¹⁸, R²⁰, R²¹, R²², R²⁴, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³⁷, R³⁸ and R³⁹
10 as methyl.
9. A personal care product a claimed in Claim 1 which is an antiperspirant and/or deodorant comprising at least 10 weight % of a volatile silicone.
15
10. A personal care product a claimed in Claim 1 which is a hair care product.
11. A personal care product a claimed in Claim 1 which is a soap bar.
12. A personal care product a claimed in Claim 1 which is a shower gel.
20
13. A personal care product a claimed in Claim 1 which is a mousse.
14. A personal care product a claimed in Claim 1 which is a shampoo.
25
15. A personal care product as claimed in Claim 1 which is a hair conditioner.